



Features

- ✓ Monitoring the service life of a data cable at risk of failure (e.g. function-critical data cable in dynamic or mechanically stressed applications like drag chains)
- ✓ Increased system availability through predictable downtimes
- ✓ Reduction in maintenance costs
- ✓ Simple commissioning with automated parameterization ("teach-in" in a few seconds)
- ✓ Requires no new data line or changes to the cable design; retrofitting into the existing network structure is possible at any time
- ✓ Reliable IIoT communication thanks to MQTT interface
- ✓ Suitable for data lines in accordance with transmission standard 100BASE-TX (with 100 Mbit/s) according to IEEE 802.3

Ethernet Cable Guard

The Ethernet Cable Guard enables the service life monitoring of standard Ethernet data cables (100Base-TX) with a focus on dynamic applications in automation technology, such as a drag chain cable to moving machine parts (robots).

With the Ethernet Cable Guard, system availability can be increased and downtimes can be planned. This enables a significant reduction in maintenance costs.

The Cable Guard is looped into the drag chain cable to be monitored and can provide information about the quality of the cable connection via a status LED, a separate network connection or a digital output. The feedback can be displayed as a PWM signal at the output. The alarm threshold value can be set individually.

For integration into IIoT structures, the monitored cable status can also be sent via MQTT by the Cable Guard.

The particularly compact design is suitable for use in decentralized control cabinets and can be mounted on standard top-hat rails.

The Cable Guard is also suitable for EtherCAT, EtherNet/IP and 2-pair PROFINET applications.

General information

Order number	700-200-LAN01
Article name	Ethernet Cable Guard
Scope of delivery	Ethernet Cable Guard with power supply plug

Dimensions (DxWxH)	35 x 48,5 x 75,5 mm
Weight	Approx. 110 g

LAN Interface

Number / Connection	1
Connection	RJ45
Transmission rate	10/100 Mbit/s
Features	HTTPS Web access
Protocols	MQTT V3.1.1 & V5

DATA Interfaces

Number / Connection	1
Connection	RJ45
Transmission rate	10/100 Mbit/s
Delay	735 ns at 100 Mbps

Outputs (Q1 / Q2)

Number / Connection	2
Type	Q1: Push-Pull (NO) / Q2: Push-Pull (PWM)
Current	Max 0,2 A
Protection	Overload protection, short-circuit protection

Status indication

Functional status	3 LEDs
Ethernet status	6 LEDs

Power supply

Voltage supply	24 V DC, 18 ... 30 V DC
Current draw	max. 75 mA at DC 24 V
Power dissipation	max. 1,9 W

Ambient conditions

Ambient temperature	-40 °C ... +65°C
Transport and storage temperature	-40 °C ... +80 °C
Relative air humidity	95 % r H without condensation

Protection rating	IP20
Pollution degree	2
Mounting position	As desired
Approvals	CE